ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/97 Date Received: 09/25/97

Project: Metro Self Monitor, PO# M58518

Date Samples Extracted: 10/09/97 Date Extracts Analyzed: 10/09/97

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M58518	0.49	0.68	0.62	0.14
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 710012-01 (Duplicate)

Reporting Analyte: Units	g Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium mg/L (ppm			3 2	0-20
Copper mg/L (ppm Nickel mg/L (ppm Zinc mg/L (ppm	n) 0.40	0.42 0.45 0.09	12 12a	0-20 0-20 0-20

Laboratory Code: 710012-01 (Matrix Spike)

	Reporting	Spike	Sample	% I	Recovery	Acceptance	Relative Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	0.34	94	98	80-120	4
Copper	mg/L (ppm)	5	0.40	94	98	80-120	4
Nickel	mg/L (ppm)	10	0.40	95	99	80-120	4
Zinc	mg/L (ppm)	5	0.08	96	101	80-120	5

Laboratory Code: LCS

	Reporting	Spike	% Rc	ecovery	Acceptance	Relative Percent
Analyte:	Units	Level	MS	MSD	Criteria	Difference
Chromium	ma/L (nnm)	E	100	103	80-120	9
Copper	mg/L (ppm) mg/L (ppm)	5 5	102	105	80-120	3
Nickel	mg/L (ppm)	10	101	104	80-120	3
Zinc	mg/L (ppm)	5	102	104	80-120	2

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

18.

PJ#709130 KJ AI 09.25.97

SAMPLE CHAIN OF CUSTODY

628 HALford 150.	
(200) 382-8779 FAX# Date 9-25-	77
PROJECT NAME PURCHASE ORD	ER#
7238 · metro Sulf montan n 585/8	
PROJECT LOCAT	ION
	he 5.
SAMPLE DISPOSAL INF Dispose after 30 d	
Dispose after 30 d Return Samples	ays
Call for Instructio	ns
Date/Time Type of # of Lab Analys	ęs
Sample & Sampled Sample Jars Sample # Request 585/8 9/2/52 1145 1/2 () / O) CK Cu N	
1585/8 9/25/57 11:45 H20 / OI CK CU M	, 27
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	4
SNA NURE COMPANY Date	Time
Genseo A Thomas ACM 9/25/57	1:000
Jon Russell Ton Russell FBI 9.25.9	1:00/2
TOTAL	, , , , , , , , , , , ,

06/09/97

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

October 10, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on September 25, 1997 from your Metro Self Monitor, PO# M58518 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

keh Enclosures

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

October 10, 1997

INVOICE # 97ACU1010-3 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M58518: Results of testing requested by Gerry Thompson for material submitted on September 25, 1997.

FEDERAL TAX ID #(b) (6)